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WPI Acc No: 1984-063176/198411  
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Pressure die casting machine - admits high-pressure gas to mould closed against pressure chamber before casting  
Patent Assignee: INST METALOSNANIE TECHN (MEOS ); INST METALOSNANIE TECHN METALI (MEOS )

Number of Countries: 010 Number of Patents: 013

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DD 204056	A	19831116	DD 244241	A	19821025	198411 B
ES 8400269	A	19840116				198416
DE 3240242	A	19840503	DE 3240242	A	19821029	198419
GB 2129343	A	19840516	GB 8230508	A	19821026	198420
FR 2535231	A	19840504	FR 8218157	A	19821029	198423
JP 59087963	A	19840521				198426
HU 32278	T	19840730				198435
CS 8207828	A	19850116				198514
GB 2129343	B	19860129				198605
CH 661883	A	19870831				198738
DE 3240242	C	19871022				198742
IT 1148442	B	19861203				198846
JP 91005900	B	19910128	JP 82196147	A	19821110	199108 N

Priority Applications (No Type Date): DD 244241 A 19821025; DE 3240242 A 19821029; FR 8218157 A 19821029; GB 8230508 A 19821026

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DD 204056	A		14		

Abstract (Basic): GB 2129343 A

A method of pressure die casting under the action of a gaseous pressure medium, using a casting apparatus having a casting mould and an injection chamber arranged to receive a charge of molten casting material and to inject the charge under pressure into the casting mould when the latter has been filled with gaseous pressure medium which acts upon the incoming charge of molten material and which applies two-sided pressure action on the material as it solidifies in the casting mould, comprising the following steps: initially blocking communication between the casting mould and the injection chamber; introducing gaseous pressure medium to the casting mould up to a predetermined pressure; charging the injection chamber with a charge of molten casting material; and establishing communication between the injection chamber and the casting mould and injecting the charge of molten material from the injection chamber into the casting mould, while maintaining substantially the predetermined pressure of the gaseous pressure medium in the casting mould.

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DD 204056 A

A pressure die casting method for non-ferrous metals using a piston-type casting machine with a horizontal pressure chamber injects the melt in the mould in presence of a bilateral pressure of 15-25 MPa. Before the start of the casting operation the mould cavity is separated from the horizontal pressure chamber by a hydraulically operated closure. After producing a gas pressure in the mould, the melt is poured in the pressure chamber and the latter is again connected with the mould.

The production of the gas pressure independent of the flow of the melt results in an improved structural texture and better mechanical properties of the castings.

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Abstract (Equivalent): GB 2129343 B

A method of pressure die casting under the action of a gaseous pressure medium, using a casting apparatus having a casting mould and an injection chamber arranged to receive a charge of molten casting material and to inject the charge under pressure into the casting mould when the latter has been filled with gaseous pressure medium which acts upon the incoming charge of molten material and which applies two-sided pressure action on the material as it solidifies in the casting mould, comprising the following steps: initially blocking communication between the casting mould and the injection chamber; introducing gaseous pressure medium to the casting mould up to a predetermined pressure; charging the injection chamber with a charge of molten casting material; and establishing communication between the injection chamber and the casting mould and injecting the charge of molten material from the injection chamber into the casting mould, while maintaining substantially the predetermined pressure of the gaseous pressure medium in the casting mould.

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